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A FOLLOW-UP STUDY OF 1963 COLORADO HIGH SCHOOL GRADUATES.

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IN 1963, 19,297 HIGH SCHOOL STUDENTS GRADUATED IN COLORADO. OF THE 577 TO WHOM QUESTIONNAIRES WERE MAILED IN 1965, 386 RESPONDED. THEIR RESFONSES WERE ANALYZED TO DETERMINE THE OCCUPATIONAL AND EDUCATIONAL NEEDS OF GRADUATES ENTERING THE LABOR MARKET. TABULAR DATA ARE GIVEN FOR RESIDENCE, CURRENTLY AND AS STUDENTS, GEOGRAPHIC MOBILITY, AGE, SEX, MARITAL STATUS, HIGH SCHOOL CURRICULUM PURSUED, PRESENT EMPLOYMENT STATUS, NUMBER OF JOBS HELD, EMPLOYMENT IN FULL- OR PART-TIME JOBS, INDUSTRIES REPRESENTED BY JOBS, YEAR EACH JOB BEGAN, LENGTH OF TIME ON JOBS, REASONS FOR LEAVING JOBS, SCHOOLS ATTENDED AFTER HIGH SCHOOL, YEAR STARTED IN SCHOOLS, TYPE OF SCHOOLS ATTENDED, MAJOR IN SCHOOLS, REASONS FOR LEAVING SCHOOL, VALUE OF HIGH SCHOOL SUBJECTS IN OBTAINING A JOB, INTEREST IN AN AREA VOCATIONAL SCHOOL, OCCUPATIONAL INTEREST, AND OCCUPATIONAL PATTERNS OF FATHER. APPROXIMATELY ONE-HALF OF THE SAMPLE WAS EMPLOYED AT THE TIME OF THE SURVEY. MORE THAN ONE-HALF DID NOT CONSIDER THEIR HIGH SCHOOL PROGRAM HELPFUL IN OBTAINING WORK. NEARLY ONE-THIRD EXPRESSED AN INTEREST IN ATTENDING A LOCAL VOCATIONAL SCHOOL AT THE TIME OF THE SURVEY. (FS)

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A FOLLOW-UP STUDY OF

1963 COLORADO HIGH SCHOOL

GRADUATES

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FOLLOW-UP STUDY

Section I - Procedures And Returns

This study was conducted by the Occupational Research Center to examine the post high school experiences of graduates of the 1963 class of Colorado secondary schools. The study was an attempt to determine the occupational and educational needs of graduates entering the labor market in comparison to how well these needs were being met by educational facilities at the time of graduation and how well the student was prepared for the types of occupations he would actually enter when he left school.

At this time of increased emphasis on job preparation for young people, it seems quite important to assess what the beginning job patterns are and what vocational training young people are interested in pursuing. The emphasis on vocational preparation needs to be preceded by the validation of what preparation would best fit the needs of the trainee. This then was one of the major purposes of the study, to determine job patterns of graduates so that better use of training time could be assumed for the student, both while he was still in high school and later while he was training in other educational facilities. Another important purpose of the study was to establish a baseline against which subsequent follow-up studies might be compared.

Follow-Up Procedures:

The sample was chosen from the 1963 graduating class because it was felt that those graduates would have been out of school long enough to have established occupational or educational patterns, but not so long that they would be hard to locate. There were 19,297[1] high school graduates in Colorado in 1963. An original sample size of 500 was selected because it was felt that a random sample

of this size would be representative of the total group and at the same time would be workable for analysis purposes.

In order to collect and analyze the data more meaningfully, the state was divided into five areas. The five divisions were: Area 1, the Metropolitan or Denver Area; Area 2, the Northwest or Western Mountain Area; Area 3, the Southwest or Navajo Trail Area; Area 4, the Southeast or Arkansas Valley; and Area 5, the Northeast or Platte Valley Area. These areas correspond almost directly with those used by the Colorado Economic Council. Included in the Denver Area were Adams, Arapahoe, Boulder, Clear Creek, Denver, Douglas, Gilpon, and Jefferson Counties. The Western Mountain Area contained Delta, Eagle, Garfield, Grand, Gunnison, Mesa, Moffat, Montrose, Rio Blanco, and Routt Counties. The Navajo Trail Area consisted of Alamosa, Conejoes, Costilla, Dolores, La Plata, Montezuma, and Rio Grande counties. Included in the Arkansas Valley Area were the counties of Baca, Bent, Chaffee, Cheyenne, Crowley, Elbert, El Paso, Fremont, Huerfano, Kiowa, Kit Carson, Lake, Las Animas, Lincoln, Otero, Prowers, and Pueblo. The South Platte Area consisted of Larimer, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, and Yuma Counties.

Since the total number of graduates was known for each area, a list of numbers that represented those graduates was compliled. Having this list, a table of random numbers was used to determine which of the numbers would represent the sample. Once these numbers were known, it could be determined from which schools the persons were graduated.

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1. The number of high school graduates in Colorado in 1963 was collected and compiled by Elaine Homan, Secretary to the Legislative Committee on Education Beyond High School of the Colorado Legislature. The number of graduates were given for each school in addition to county and state totals.

Letters were sent to the principals of the schools in which our subject numbers had fallen. The letter explained the purpose of the study and asked that the principal fill out a High School Graduate's Form for each of the numbers that fell within that school's list of graduates.

When the High School Graduate's Forms were returned, a letter of introduction and a five page questionnaire, (the Follow-up of Former High School Students Questionnaire) was sent to each subject. After a reasonable length of time, a second letter was sent to those persons who had not responded. A third letter and another copy of the questionnaire were later sent to those persons who had still not responded. (See appendices for copies of all materials utilized in the study.)

A replacement sample of 123 subjects was selected at the same time as the original sample of 500. The original purpose of the replacement sample was to use individuals from the sample to replace those from the primary sample who would not respond or could not be located. The mechanics of the procedure broke down, and, consequently, the replacement sample was contacted in the same manner as the original sample. In effect, this resulted in our sample being of size 623 rather than 500.

Since some of the principals refused to divulge names and addresses of their 1963 graduates, the sample actually used in the study totaled 595 subjects. Two schools returned names of 1965 graduates rather than 1963 graduates. Eighteen subjects were from these schools. Thus our sample of 1963 graduates consisted of 577 subjects. Analyses of certain demographic characteristics included the data from the 1965 graduates but this 1965 data were not used for analyses of job and educational patterns of the graduates.

Returns:

Of the five hundred seventy seven 1963 graduates in the sample, 386 or 67% returned the questionnaire. Fourteen of the eighteen 1965 graduates responded, or 78 percent. The total return was 67 percent.

As previously mentioned, follow-up procedures were used in order to obtain a higher response ratio. These procedures included: (1) a sendout of the questionnaire with an introductory letter to the subject; (2) a follow-up letter to the subject asking him to send in the questionnaire; and (3) a second sendout questionnaire to the subject. The usefulness of the procedures is summarized in Table 1.

Table 1 Response Obtained By Follow-up Procedures

Follow-up Method	Total Sample	Percent Return of Total Sample	Sample at time of Method	Percent Return of Possible Sample
First Send-out	595	41.85%	595	41.85%
Follow-up Letter	595	9.92%	346	17.05%
Second Send-Out	595	15.13%	287	31.36%

Of the 595 possible returns, 249 subjects or 41.85 percent responded to the first sendout of the questionnaire, 59 subjects or 9.92 percent responded to the follow-up letter, and 90 subjects or 15.13 percent responded to the second sendout of the questionnaire. Because 249 subjects had already responded at the time of the follow-up letter, 59 subjects or 17.05 percent of the possible 346 subjects responded to the follow-up letter. Because 308 subjects had responded at the time of the second sendout, 90 subjects or 31.36 percent of the possible 287 subjects responded to the second sendout of the questionnaire.

The preceding results indicate that the follow-up letter was not as effective as was either of the sendouts of the questionnaire. The results of these follow-up procedures might have implications for other follow-up studies.

For maximum results, it is better to include a copy of the questionnaire if it is practical, with any correspondence directed toward the subject.

Of the 577 graduates of the 1963 class in the sample, 191 did not return the questionnaire. Of these 191, there were 38 who could not be contacted, there were 12 refusals, and 141 who simply did not return the questionnaire. Because of the large group of nonrespondents, the subjects who did respond could no longer be considered a random sample of the total 1963 graduate population. In order to determine the representativeness of the respondents in relation to the total group, a sample of nonrespondents are being contacted by telephone to impress upon them the importance and the confidential nature of the information they could provide. It is felt that this procedure, if successful in inducing a large enough group of nonrespondents to send in the questionnaire, will enable us to determine whether or not the nonrespondent group is similar to the respondent group. This in turn will indicate whether or not the respondent group is representative of the total group and will demonstrate the validity of the assumption that the 386 respondents actually represent the 1963 graduation class.

However, the 386 respondents made up 67% of the sample, and their completed questionnaires were considered to be a valuable source of information about the 1963 graduating class of Colorado high schools. It was also felt that the analysis of this information would be useful in this preliminary report.

SECTION II--RESULTS OF DEMOGRAPHIC ANALYSIS

In this preliminary report, the results are confined to the general characteristics of the sample. It was felt that to include all of the useable relationships that were possible would have made the report so extensive as to be confusing. The purpose of the analysis of data in this preliminary report was to provide information and to develop the foundation for the reporting of relationships that could be found by subsequent analyses.

Because not all subjects answered all questions, the figures listed in all of the tables that follow were computed by determining the number who responded to each portion of the item as the percentage of the total number who responded to the item. All percentage figures were rounded to the nearest tenth of one per cent, therefore, the figures do not necessarily add to 100 percent.

The results of the sorting on the items listed on page one of the questionnaire have been summarized in Tables 2 through 11.

Table 2. Percentages Of Subjects Within Each Area At The Time Of High School Graduation And Again At The Time Of The Survey. N=396.

Area	High School (June, 1963)*	Presently (Jan., 1966)**
	%	%
Denver	49.7	43.2
Western Mountain	9.6	6.1
Navajo Trail	4.0	3.0
Arkansas Valley	22.7	18.9
South Platte	13.9	13.9
Out of State	0.0	14.9

As shown in Table 2, all of the areas within the state lost subjects with the exception of the South Platte Area. The presence of a state university, a state college, and a state junior college within the South Platte Area might be one of

* Fourteen of the subjects graduated in June, 1965.

** Questionnaires were received from December, 1965 through April, 1966.

the reasons the youth remain in or go to that area. Nearly fifteen percent of the sample live outside of the state. At a time when Colorado is one of those states with large in-migration, fifteen percent of its high school graduates are leaving the state.

It should also be noted that the nonrespondents and the untraceable subjects are more likely to be located outside of the state. This is not meant to imply that the state is losing population because the in-migration more than makes up for the people leaving the state. In addition, many of those who have left have done so on a temporary basis. Some will return to the state when they have completed the requirements of their schooling or completed their armed forces obligations.

In Table 3, the relationship between mobility and area of present residence is shown.

Table 3. Mobility Of Subjects Within State Areas And To Out-Of-State. Figures Listed Are Percentages Of Subjects From Each High School Area. N=396.

	Area Of Present Residence						
High School Area	Denver	West Mountain	Navajo Trail	Arkansas Valley	South Platte	Out of State	Total
	%	%	%	%	%	%	%
Denver (N=195)	80.5	0.5	0.0	1.0	4.6	13.3	100.0
West Mountain (N=38)	2.6	60.5	0.0	5.3	7.9	23.7	100.0
Navajo Trail (N=16)	6.3	0.0	75.0	0.0	0.0	18.8	100.0
Arkansas Valley (N=90)	8.9	0.0	0.0	77.8	1.1	12.2	100.0
South Platte (N=59)	6.8	0.0	0.0	0.0	71.2	16.9	100.0

Note: Area of Present Residence was defined as that area the subject listed as being his current address. In some cases, the subject indicated his home address even though he was attending school in another area. Therefore, some subjects living in one area considered another area as their present address.

It was generally assumed before the study that the young people of the state would tend to gravitate to the Denver Area after completing high school. There are indications from this study however that, at least in 1963, the young people tended to leave the state more than migrating to the Denver Area.

If the sample is characteristic of the state's young people, every area of the state is losing some of its youth. Not considering in-migrations from other states, Table 4 has been included to indicate the present size of each area as a percentage of its original size.

Table 4. Present Number Of Subjects In Each Area As Percentages Of The Number Of Subjects In That Area In 1963. Figures Listed Include Both The People Who Were In That Area In 1963 And Have Remained There And Those Who Have Moved There From Other Areas Of Colorado Since 1963. Figures Do Not Include People Who Have Moved Into The Areas From Outside The State.

Area	Percentage Of Sample Retained
	%
Denver (N=195)	87.7
Western Mountain (N=38)	63.2
Navajo Trail (N=16)	75.0
Arkansas Valley (N=90)	82.2
South Platte (N=59)	93.2

Age

Table 5. Age Of Subjects Listed & Percentage Of The Total Sample That Fell Within Each Category. N=395

Age Group	Percent of Sample
18	2.3
19	4.0
20	67.1
21	23.5
22	1.8
Other	1.3

The age of the fourteen subjects who graduated in 1965 were included in the figures in Table 5. Without these people, the 18 year old category would have had a zero entry and the 19 year old category would have had an entry of approximately 1.3 percent.

Sex

Table 6. Sex Of Total Sample Of Subjects Listed As Percentages. N=398

Sex	Percent of Sample
Male	51.0
Female	49.0

Marital Status

Table 7. Marital Status Of Subjects Listed As Percentages Of The Total Sample That Fell Within Each Category, And Percentage Of The Male And Female Samples Within Each Category. N=394

Marital Status	All Subjects	Male Subjects	Female Subjects
	%	%	%
Single	67.3	76.2	56.1
Married	31.7	23.3	42.3
Divorced	0.8	0.5	1.1
Widowed	0.2	0.0	0.5

High School Curriculum

Table 8. The High School Curriculum Of Subjects Listed As Percentage Of The Male And Female Samples That Fell Within Each Category. N=393

Curriculum	All Subjects	Male Subjects	Female Subjects
General	44.8	42.6	45.7
Vocational	7.6	6.3	8.6
Precollege	46.6	50.5	44.1
Other	1.0	0.5	1.6

Less than eight percent of the sample pursued a vocational major in high school. In comparison, over 46 percent of the sample planned for college while still in high school or at least took the college preparatory curriculum.

Occupational Patterns Of Fathers

Table 9. Occupations Of Fathers Or Guardians Of Subjects Listed As Percent Of Total Group That Fell Within Each Category As Compared With The 1960 Census Grouping Of Occupations In Colorado. N=389

Occupation	Survey Sample	1960 Census Groupings*
	%	%
Technical-Professional	14.9	11.9
Managerial	29.0	18.9
Clerical and Sales	10.3	13.5
Craftsmen and Foremen	18.0	18.7
Service and Operators	10.3	22.5
Laborers	11.8	10.8
None or Unknown	5.4	3.8

The tendency for the fathers of the subjects to be in more advanced occupations seems reasonable since the fathers of the subjects would be older on the average than the general population and would have had more time to advance into higher level jobs.

Present Employment Status

Table 10. Number Of Total Sample, Male Sample, And Female Sample Who Were Employed And Who Were Not Employed At The Time Of The Survey In Both Full And Part-time Jobs. Figures Listed Are Percentages That Fell Within Each Category. N=394

Employment Status	All Subjects	Male Subjects	Female Subjects
	%	%	%
Employed	53.8	59.9	48.1
Not Employed	46.2	40.1	51.9

Table 11. Characteristics Of The 37 Subjects Who Gained Employment Immediately After Leaving High School And Remained At That Job For Four Or More Months. Figures Are Listed As Percent Of 37.

Sex		High School Curriculum			
Male	Female	General	Vocational	Pre-College	Other
51.4	48.6	59.9	10.8	27.0	2.7

*Compiled from U.S. Census of Population, 1960. Colorado, General Social and Economic Characteristics, PC(1)-7C.

SECTION III--JOB CHARACTERISTICS ANALYSIS

Information concerning the occupational characteristics of the subjects has been compiled in Tables 12 through 26. For this and additional analyses, the fourteen subjects who graduated in 1965 were eliminated from the sample. The sample size for the remaining tables is 386.

Table 12. Number Of Jobs Held By The Subjects Listed As Percentages Of The Total Sample. N=382

Number of Jobs	Total Sample	Male Sample	Female Sample	General Curriculum	Vocational Curriculum	Pre-College Curriculum
0	7.6	7.3	8.4	7.9	10.7	7.3
1	24.3	20.3	28.4	25.5	39.3	22.5
2	26.2	26.0	26.3	28.5	14.3	24.2
3	22.0	22.4	21.6	18.8	17.9	25.3
4	11.8	14.1	8.9	13.9	14.3	9.6
5 or More	8.1	9.9	6.3	5.5	3.6	11.2

In Table 13 through Table 19 the characteristics of jobs have been grouped together without reference to how many jobs and subject held. Such grouping was not felt to be as meaningful as would the comparison of the jobs of people who had held one job, two jobs, three jobs, etc. However, the analysis was done to obtain an indication of job characteristics.

Table 13. The Full Or Part-Time Nature Of The Job Listed As Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subject.

Nature of Work	Latest Job, N=353	Second Job, N=256	Third Job, N=152	Fourth Job, N=97	Fifth Job, N=25
Full	63.6	60.5	53.3	47.7	32.0
Part	36.4	39.5	46.7	52.6	68.0

Table 14. The Industries Of Jobs Listed As The Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Industry Of Job	Latest Job, N=353	Second Job, N=261	Third Job, N=159	Fourth Job, N=65	Fifth Job, N=22
Agricultural	3.1	1.1	5.0	10.8	4.5
Construction & Mining	3.7	5.4	6.3	7.7	0.0
Manufacturing, Heavy	2.8	3.1	2.5	1.5	0.0
Manufacturing, Light	4.2	4.6	3.1	3.1	4.5
Transportation & Communications	5.1	4.6	2.5	1.5	13.6
Trade, Wholesale & Retail	19.5	27.6	34.6	27.7	50.0
Business & Service	22.9	25.3	18.9	27.7	22.7
Non-Profit (Hospitals, Government, Education, etc.)	29.1	17.2	18.2	6.2	9.1
Armed Forces	3.8	0.4	0.0	0.0	0.0
Other, Unknown, or None	6.2	10.7	8.8	9.2	4.5

Table 15. The Occupations Of Jobs Listed As The Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Occupation Of Job	Latest Job, N=341	Second Job, N=247	Third Job, N=161	Fourth Job, N=65	Fifth Job, N=24
Technical-Professional	11.4	6.1	1.2	0.0	0.0
Managers	2.3	0.8	1.2	2.7	4.2
Clerical & Sales	33.7	35.6	29.2	32.4	33.3
Craftsmen-Foremen	5.9	5.7	6.8	6.8	0.0
Service & Operators	16.4	25.5	23.6	16.2	25.0
Laborers	25.2	30.0	36.6	40.5	37.5
Unknown or None	2.1	1.2	1.2	1.4	0.0

Table 16. The Area Of Jobs Listed As Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Area Of Job	Latest Job, N=353	Second Job, N=262	Third Job, N=161	Fourth Job, N=95	Fifth Job, N=23
Denver	39.9	42.7	44.1	43.2	47.8
Western Mtn.	7.4	11.1	11.8	6.3	0.0
Navajo Trail	3.4	3.4	2.5	6.3	0.0
Arkansas Valley	16.7	17.6	16.8	20.0	26.1
Platte River	13.6	11.5	10.6	14.7	13.0
Out of State	19.0	13.7	14.3	9.5	13.0

Table 17. Year Started Job Listed As Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Year Started	Latest Job, N=340	Second Job, N=247	Third Job, N=153	Fourth Job, N=73	Fifth Job, N=23
1960	0.0	1.6	0.7	2.7	0.0
1961	1.2	1.2	5.2	2.7	13.0
1962	2.6	3.2	3.3	2.7	17.4
1963	15.3	23.1	35.9	47.9	30.4
1964	17.1	31.6	40.5	37.0	21.7
1965	61.2	38.9	14.4	6.8	17.4
1966	2.6	0.4	0.0	0.0	0.0

Table 18. Length Of Time On Job Expressed As Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Length In Months	Latest Job, N=332	Second Job, N=245	Third Job, N=160	Fourth Job, N=71	Fifth Job, N=22
0-6 Months	63.9	74.2	76.3	84.4	68.0
7-12 Months	11.7	11.7	15.7	8.4	22.5
13-24 Months	11.7	8.0	4.4	2.8	4.5
25 Or More Months	9.6	5.7	3.7	4.2	4.5

Table 19. Reason For Leaving If Not Still On The Job Listed As Percentage Of All Subjects Who Held Each Number Of Jobs Without Regard To The Number Of Jobs Held By Any Group Of Subjects.

Reason	Latest Job, N=343	Second Job, N=269	Third Job, N=161	Fourth Job, N=76	Fifth Job, N=24
Still on Job	53.6	3.0	0.0	0.0	0.0
No Reason Given	1.2	0.7	0.6	1.3	4.2
Went to School	24.2	32.3	36.6	42.1	37.5
Went to Service	0.9	3.0	1.2	0.0	0.0
Temporary-Seasonal	5.5	8.9	9.9	13.2	20.8
Discharged	0.6	4.8	8.7	3.9	0.0
Moved	1.2	6.7	8.1	5.3	8.3
Dissatisfaction	0.9	6.7	5.6	3.9	12.5
Marriage	2.6	2.2	1.9	0.0	0.0
Pregnancy	2.4	1.1	0.0	0.0	0.0
Other	6.8	23.9	26.1	30.1	16.7

Comments On Section III

The overview gained from the preliminary analysis of occupational characteristics resulted in several questions becoming apparent. Several of these questions are listed below as possible hypotheses for future analyses.

1. How do the job characteristics of each job differ for those who held one job, two jobs, three jobs, four jobs, and five jobs, respectively? Such analysis might include:
   a) The full-time and part-time nature of the work experience as the subject progresses in job maturity.
   b) The type of industry entered and the type of occupation entered as the subject progresses from job to job.
   c) The area changes of subjects as they change their jobs.
   d) The stability or length of time the subject remains on the job as a function of the number of jobs the subject has held.
   e) The reasoning behind leaving a job for subjects who have held different numbers of jobs.
2. How do job characteristics of each job differ for those subjects who are in school now, those subjects who entered school but dropped out, and those subjects who did not go on to school after high school graduation?
3. How do job characteristics differ for male and female subjects who choose different curriculums in high school?
4. Are there patterns of types of industries entered and types of occupations entered in the different areas?

SECTION IV--SCHOOL CHARACTERISTICS ANALYSIS

Tables 20 through 27 have been compiled in an attempt to examine the educational patterns of the subjects.

Table 20. Number Of Schools Attended By The Subjects. Figures Are Listed By Percentage Of Total Sample Who Responded. N=384

Number of Schools	Percentage of Students Attending
0	22.5
1	50.6
2	23.8
3 or More	3.1

Table 21. Area Of Schools Listed As Percentage Of Students Who Attended Only One School And For All Subjects Who Attended One Or More Schools.

Area of School	Subjects Who Attended Only One School, N=198	Latest School Of All Subjects Who Attended One Or More Schools, N=298
Denver	31.8	32.2
Western Mountain	7.1	6.4
Navajo Trail	2.5	4.0
Arkansas Valley	10.6	9.7
Platte River	25.3	22.1
Out-of-State	22.7	25.5

Table 22. Year Started In School Listed As Percentage Of Students Who Attended Only One School And Also For All Students Who Attended One Or More Schools.

Year Started	Subjects Who Attended Only One School, N=189	Latest School Of All Subjects Who Attended One Or More Schools, N=276
1960	0.0	0.0
1961	0.0	0.0
1962	0.0	0.0
1963	80.4	59.9
1964	12.2	20.8
1965	5.8	17.3
1966	1.6	2.1

Table 23. Type Of School Listed As Percentage Of Subjects Who Attended Only One School And For Subjects Who Attended One Or More Schools.

Type of School	Subjects Who Attended Only One School, N=196	Latest School Of Subjects Who Attended One Or More Schools, N=298
Public University	37.2	34.2
Private University	1.0	2.3
Public College	23.5	23.2
Private College	6.1	5.4
Junior College	8.7	8.1
Public Vocational	1.5	2.0
Private Vocational	14.3	12.8
Extension School	0.5	2.3
Hospital	1.5	1.7
Armed Forces School	4.6	7.0
Other	1.0	0.9

Table 24. Major Of Subjects Listed As Percentage Of Subjects Who Attended Only One School And For Subjects Who Attended One Or More Schools.

Major	Subjects Who Attended Only One School, N=193	Latest School Of Subjects Who Attended One Or More Schools, N=289
Blank or General	6.2	6.2
Business, Office, Secretarial, etc.	12.4	11.4
Management Training & Sales	0.0	0.3
Barber & Cosmetology	6.2	4.2
Mechanical-Electrical Vocational	3.6	3.5
Medical Technology & Nursing	8.8	6.9
Religious	1.0	0.7
Science & Mathematics	15.5	14.2
Engineering	7.8	8.0
Agriculture & Forestry	3.1	2.4
Humanities & Language	13.5	18.7
Social Science	13.0	14.2
Business	6.2	6.2
Physical Education	1.6	1.7
Home Economics	1.0	1.4

Table 25. Length Of Time In School Listed As Percentage Of Subjects Who Attended Only One School And For Subjects Who Attended One Or More Schools.

Length Of Time In School In Months	Subjects Who Attended Only One School, N=191	Latest School Of Subjects Who Attended One Or More Schools. N=276
0-6 Months	15.5	28.6
7-12 Months	20.4	17.3
13-24 Months	13.8	17.2
25 or More Months	50.3	36.9

Table 26. Degree Status Of Subjects Listed As Percentage Who Attended Only One School, Attended One Or More Schools.

Degree Status	Subjects Who Attended Only One School, N=186	Latest School Of Subjects Who Attended One Or More Schools, N=281
None	27.4	28.8
Still in School	54.3	55.5
Graduated-No Degree	1.6	1.1
Certification or Registration	10.8	8.9
Diploma	3.8	3.6
Other	2.2	2.1

Table 27. Reason For Leaving For Those Not Still In School Given For Those Subjects Who Attended Only One School, Attended One Or More Schools. Figures Are Listed As Percentages Of Each Group.

Reason	Subjects Who Attended Only One School, N=186	Latest School Of Subjects Who Attended One Or More Schools, N=277
Still in School	54.8	56.3
None	2.7	2.2
Financial	4.8	4.7
Graduated	13.4	11.9
Went to Service	1.1	0.7
Temporary Course	0.0	0.7
Grades Inadequate	2.7	2.9
Transferred	1.1	1.1
Dissatisfaction	6.5	6.1
Marriage	3.8	2.5
Pregnancy	0.5	0.4
Other	8.6	10.3

Comments On Section IV

Again, the overview gained from this preliminary analysis has resulted in several questions concerning the educational patterns of the subjects. Further analysis would make possible the answering to the questions listed below.

1. How do the educational experiences differ for those subjects who have attended a different number of schools? Such an analysis would include:
   a) The areas the subjects moved to for their schooling as a function of their high school area.
   b) The type of school the subjects chose as a function of how many schools they attended.
   c) The amcunt of time spent in each school and the year started each progressive school.
   d) The major chosen with each additional school.
   e) The reasoning behind leaving a school as the subject moves from school to school.
2. Are there patterns of majors that appear as a function of the type of school being attended?
3. How do the school characteristics differ for those subjects who went to school immediately after graduation from high school as compared to students who waited before attending a school?
4. Are there differences in school characteristics for those who have remained in school as compared to those who have dropped out of school?
5. How do school characteristics differ for male students as opposed to female students? Are there differences based on curriculum? Father's occupation? Area of residence?

SECTION V--ANALYSIS OF SURVEY QUESTIONS

Tables 28 through 36 resulted from the analysis of the questions that were asked on the survey.

Table 28. Percentages Of Responses To Question 11. Were The Major Subjects You Studied In High School Helpful In Obtaining A Job? N=345

Response	%
Yes	40.0
No	60.0

The ratio of response to this question is quite surprising. It indicated that over one-half of the sample felt that their high school course work was not valuable in obtaining a job. The subjects who are still in college undoubtedly biased the responses. A later report will separate out those subjects who did not go on to college and study their responses to that question.

Table 29. Responses Listed As Percentages Of Those Who Answered Question 13. If There Had Been A School Offering Vocational Classes In Your Hometown Area When You Graduated, Would You Have Attended Such A School If It Had Offered Courses In Which You Were Interested? N=371

Response	%
Yes, wanted to attend such a school	11.6
Yes, it would have cost less	9.4
Yes, wanted to stay home while attending school	3.8
No, wanted to attend school away from home	5.9
No, not interested in further schooling	8.4
No, wanted to attend college	51.5
Other	9.4

Table 30. Responses Listed As Percentages Of Those Who Answered Question 14. If A Vocational School Were Started In The Area Where You Live At This Time And Offered Courses In Fields Of Interest For You, How Would You Feel? N=367

Responses	%
Would be unhappy to see such a school	3.0
Would be indifferent to such a school	8.2
Would be happy to see it started, but not interested in using	48.2
Would be interested in using to increase present job skills	18.3
Would be interested in using to develop new skills	13.6
Other	8.7

Table 31. Responses Listed As Percentages Of Those Who Answered Question 15. Where Did You Obtain The Most Information And Knowledge About Your Present Major Field Of Study Or Work Activity Prior To Your Beginning School Or Going To Work? N=364

Response	%	Response	%
Father	11.8	Counselor or Principal	6.3
Mother	4.7	High School Courses	15.9
Brother	.19	Books or Periodicals	6.3
Sister	1.4	Movies and TV	0.0
Personal Friends-Adults	12.4	Close Friend(s)	6.3
Elementary School Teachers	1.1	Other	19.2
High School Teachers	12.6		

Table 32. Responses Listed As Percentages Of Those Who Answered Question 16. What Has Influenced You The Most In Your Choice Of Major Field Or Work Activity. N=358

Response	%	Response	%
Father	9.5	Counselor or Principal	5.0
Mother	5.6	High School Courses	11.7
Brother	2.8	Books or Periodicals	4.2
Sister	0.6	Movies and TV	0.6
Personal Friends-Adults	14.0	Close Friends	5.0
Elementary School Teachers	0.0	Other	32.1
High School Teachers	8.9		

The large percentages of subjects who responded to the category "Other" in items 15 and 16 of the questionnaire raises serious doubts about both the wording and utility of these items. Of interest are the specifications added to the "Other" category. The largest number of subjects who responded with "Other" indicated that they themselves were responsible for their decisions. This suggests that they did not understand the question or did not recognize outside influences. Perhaps more appropriate wording could have made these items more functional.

Table 33. Responses To Question 17 Listed As Percentage Of Those Who Answered The Question, How Did Your Parents (Or Guardians) Feel About Your Choice Of Major Field Or Work Activity. N=363

Response	%
Strongly Approved	45.2
Approved	42.7
Somewhat Indifferent	7.2
Disapproved	2.8
Strongly Disapproved	0.3
Not Aware	1.9

Table 34. Responses To Question 18 Listed As Percentages Of Those Who Answered The Question, As You Plan For Your Occupational Future Do You Have A Preference For: N=369

Response	%
Working With Ideas	10.3
Doing Technical Work	8.7
Some Phase Of Business	14.4
Some Phase Of Agriculture	3.5
Professional Occupation	18.4
Social Service Occupation	16.0
The Fine Arts	2.4
An Occupation Centered Around Home And Family	10.3
Not Given Sufficient Thought	9.8
Other	6.2

Table 35. Responses Listed As Percentages Of Those Who Answered Question 19. As You See Your Present Situation, How Much Higher Education Or Technical Training Would You Like To Have And In What Areas? N=355

Response	%
Short Vocational Course	13.0
One Year of Technical Schooling	6.5
Two Years of Vocational or Technical Schooling	6.8
Four Years of College or Complete College	65.4
No Additional Schooling	8.5

Table 36. Selected Majors From Question 19 Listed As Percentages Of Those Who Responded. N=249

Major	%
General	6.1
Office, Secretarial, etc.	13.3
Management & Sales	1.2
Barber & Cosmetology	2.8
Mechanical-Electrical Vocational	5.2
Medic & Nursing	8.8
Religious	1.2
Science & Mathematics	10.4
Engineering	6.8
Agriculture & Forestry	2.0
Humanities & Languages	15.7
Social Science	15.7
Business	8.0
Physical Education	1.2
Home Economics	1.6

SECTION VI--SUMMARY

A summary of the findings of this preliminary analysis are included in the following comments.

1) Nearly fifteen percent of the sample have left the state.
2) The Western Mountain Area lost the greatest number of individuals.
3) More females than males were married. Over 65 percent of the total sample was still single, over 75 percent of the male sample was still single, and over 55 percent of the female sample was still single.
4) The curriculum breakdown was as would be expected with less than eight percent of the total sample pursuing a vocational major in high school.
5) Approximately one-half of the sample was employed at the time of the survey. Nearly 60 percent of the male sample was employed and nearly 50 percent of the female sample was employed.
6) The median number of jobs for the total sample was two jobs since leaving high school.
7) There was a tendency for the subjects to stay on a job for less than six months.
8) To go to school was by far the most frequent reason for leaving a job.
9) Less than one-fourth of the sample attended no schools whatsoever after completing high school.

10) Public universities and colleges accomodated the bulk of the sample graduates who obtained any post high school education. Private vocational schools were the third largest choice of the subjects for type of further schooling.

11) More than one-half of the sample did not consider their high school program helpful in obtaining work.

12) Approximately one-fourth of the sample felt that they would have been interested in attending an area vocational school immediately upon graduation from high school.

13) Nearly one-third of the sample expressed interest in attending a local vocational school at the time of the survey.

14) About two-thirds of the sample expressed a desire to complete at least four years of college.

The purpose of this report was to analyze the data gathered by use of the Follow-Up of Former High School Students questionnaire. Because of the extensive amount of information collected, this report became only a beginning. It has pointed out how the sample was determined, how the procedures for collecting the data were developed and used, and what the results of the preliminary analysis were. The report has purposefully implied that further, more extensive, analyses should be carried out. If possible, additional reports will follow this report in order to more adequately discuss some of the possible relationships between the variables found in the questionnaire. This report plus the additional reports that could be developed will help answer many questions concerning the occupational and educational needs of Colorado's young people. Perhaps more importantly, these reports could establish a baseline for other follow-up studies in the future.

SECTION VII--NON-RESPONDENTS ANALYSIS

In December, 1965, the High School Follow-Up Survey was conducted with a random sample of 577 of the 19,297 Colorado high school graduates in 1963. This survey was conducted to study the job and school patterns of high school graduates in Colorado. The 1963 class was selected because this group would more likely be in a school or on a job at the time of the survey, and this group would have over 2 years since high school to establish job and school history patterns.

Of the 577 who were mailed questionnaires, follow-up letters, and additinnal questionnaires, 386 responded by completing or partially completing the forms. This left 191 who did not complete the questionnaire. Of this group of 191, there were 38 subjects who could not be located, 12 who refused to cooperate, and 141 who did not respond for unknown reasons.

It was thought that in order to investigate the random properties of the original sample of 577 a study should be conducted with the 141 subjects who did not complete the questionnaire. This study would identify similarities and differences among those subjects who completed the questionnaire (the Respondents), and those who did not send in the information (the Non-Respondents).

A sample of the 141 Non-Respondents were contacted by telephone and asked to send in the questionnaire. This procedure yielded a group of 16 Non-Respondents who completed and send in the forms.

The follow analyses were based on the responses to the demographic items of the questionnaire for the Non-Respondent and Respondent groups.

Table 1. Comparison Of The Percentage Of Subjects Within Each Area At The Time Of High School Graduation And Again At The Time Of The Survey.

Area	High School		Presently	
	% Non-Resp. N=16	% Resp. N=396	% Non-Resp. N=16	% Resp. N=396
Denver Central	50.0	49.7	62.5	43.2
Western Mountain	0.0	9.6	0.0	6.1
Navajo Trail	12.5	4.0	0.0	3.0
Arkansas Valley	18.75	22.7	12.5	18.9
South Platte	18.75	13.9	12.5	13.9
Outside Colorado	0.0	0.0	12.5	14.9
Total	100.0%	100.0%	100.0%	100.0%

Over one-half of the non-respondents are currently living in the Denver central area in contrast to less than one-half in the respondent group. The metropolitan area shows an increase of 12.5% in the non-respondent group while a decrease of 6.5% is shown by the respondent group. All other areas show a decrease in both groups with the exception of South Platte where no change is shown in the respondent group.

Table 2. Age Of Subjects Listed & Percentage Of The Total Sample In Each Group That Fell Within Each Category.

Age	% Non-Respondent N=16	% Respondent N=395
18	0.0	2.3
19	0.0	4.0
20	43.8	67.1
21	50.0	23.5
22	0.0	1.8
Other	6.2	1.3
Total	100.0%	100.0%

A comparison of ages of the two groups indicates the average age of the non-respondent to be slightly higher than that of the respondents.

Table 3. Sex Of Total Sample Of Each Group Of Subjects Listed As Percentages

Sex	% Non-Respondents N=16	% Respondent N=398
Male	37.5	51.0
Female	62.5	49.0
Total	100.0%	100.0%

The respondent group was almost equally divided between male and female, while the non-respondents were predominately female.

Table 4. Marital Status Of Subjects Listed As Percentages Of The Total Sample Of Each Group That Fell Within Each Category.

Marital Status	% Non-Respondents N=16	% Respondent N=394
Single	68.8	67.3
Married	31.2	31.7
Divorced	0.0	0.8
Widowed	0.0	0.2
Total	100.0%	100.0%

Table 5. High School Curriculum Of Subjects Listed As A Percentage Of The Sample That Fell Within Each Category.

Curriculum	% Non-Respondents N=16	% Respondent N=393
General	68.8	44.8
Vocational	12.5	7.6
Pre-college	18.7	46.6
Other	0.0	1.0
Total	100.0%	100.0%

While in high school, the non-respondent tended to follow a general curriculum. The respondent group was rather equally divided between a general and pre-college curriculum, with a slight emphasis on pre-college. Approximately 12.5% of the graduates who did not respond to the original questionnaire indicated a vocational curriculum in high school as compared to less than eight percent of the respondent group.

The number of subjects who followed the college preparatory curriculum was almost 28% greater for the respondent than for the non-respondent.

Table 6. Occupations Of Fathers Or Guardians Of Subjects Listed As Percent Of Group Total That Fell Within Each Category As Compared With The 1960 Census Grouping Of Occupations In Colorado

Occupation	% Non-Respondent	% Respondent	% 1960 Census*
	N=16	N=389	
Technical-Professional	6.2	14.9	11.9
Managerial	37.5	29.0	18.9
Clerical & Sales	0.0	10.3	13.5
Craftsmen & Foremen	12.5	18.0	18.7
Service & Operatives	25.0	10.3	22.5
Laborers	18.8	11.8	10.8
None or Unknown	0.0	5.4	3.8
Total	100.0%	100.0%	100.0%

*Compiled from U.S. Census of Population, 1960. Colorado, General Social and Economic Characteristics, PC(1)-7C.

Table 7. Present Employment Status. Number Of Sample Total Who Were Employed And Who Were Not Employed At The Time Of The Survey.

Employment Status	% Non-Respondent	% Respondent
	N=16	N=394
Employed	75.0	53.8
Not Employed	25.0	46.2
Total	100.0%	100.0%

Only ¼ of the non-respondent group is currently unemployed, in contrast to almost ½ of the respondent group.

Table 8. Number Of Jobs Held By The Subjects Listed As Percentage Of The Total Sample Of Each Group.

No. of Jobs	% Non-Respondent	% Respondent
	N=15	N=382
0	6.7	7.6
1	26.7	24.3
2	13.3	26.2
3	20.0	22.0
4	20.0	11.8
5 or more	13.3	8.1
Total	100.0%	100.0%

Table 9. Number Of Schools Attended Listed As Percentage Of Total Sample Of Each Group Who Responded.

No. of Schools	% Non-Respondents	% Respondents
	N=15	N=384
0	53.3	22.5
1	26.7	50.6
2	13.3	23.8
3 or more	6.7	3.1
Total	100.0%	100.0%

Over one-half of the non-respondents have not attended a school of any kind after graduation. The respondent group reported 77.5% as having one or more schools.

Table 10. Percentage Of Responses To The Question, Were The Major Subjects You Studied In High School Helpful In Obtaining A Job?

Response	% Non-Respondent	% Respondent
	N=15	N=345
Yes	53.3	40.0
No	46.7	60.0
Total	100.0%	100.0%

Table 11. Percentage Of Responses To The Question, If There Had Been A School Offering Vocational Classes In Your Hometown Area When You Graduated, Would You Have Attended Such A School If It Had Offered Courses In Which You Were Interested?

Response	% Non-Respondent	% Respondent
	N=15	N=371
Yes, I wanted to go to such a school.	20.0	11.6
Yes, it would have cost less.	6.7	9.4
Yes, I could have lived at home.	6.7	3.8
No, I wanted to attend school away from home.	6.7	5.9
No, I was not interested in any more schooling.	13.3	8.4
No, I wanted to go to college.	20.0	51.5
Other	26.7	9.4
Total	100.0%	100.0%

Table 12. Responses To The Question, If A Vocational School Were Started In The Area Where You Live At This Time And Offered Courses In Fields Of Interest To You, How Would You Feel?

Response	% Non-Respondent	% Respondent
	N=15	N=367
Would be unhappy to see such a school.	0.0	3.0
Would be indifferent to such a school.	0.0	8.2
Would be happy to see it started, but not interested in enrolling.	53.3	48.2
Would be interested in enrolling to increase present job skills.	13.3	18.3
Would be interested in enrolling to develop skills for new job.	26.7	13.6
Other	6.7	8.7
Total	100.0%	100.0%

Table 13. Percentage Of Responses In Each Group To The Question, What Has Influenced You The Most In Your Choice Of Major Field Or Work Activity?

Response	% Non-Respondent	% Respondent
	N=14	N=358
Father	14.3	9.5
Mother	7.1	5.6
Brother	0.0	2.8
Sister	0.0	0.6
Personal friends - Adult	28.6	14.0
Elementary School Teachers	0.0	0.0
High School Teachers	0.0	8.9
Counselor or Principal	0.0	5.0
High School Courses	0.0	11.7
Books or Periodicals	14.3	4.2
Movies and TV	0.0	0.6
Close friends	0.0	5.0
Other	35.7	32.1
Total	100.0%	100.0%

Table 14. Responses To Question, How Did Your Parents Or Guardians Feel About Your Choice Of Major Field Or Work Activity?

Response	% Non-Respondent	% Respondent
	N=14	N=363
Strongly approved	7.1	45.2
Approved	78.6	42.7
Somewhat indifferent	0.0	7.2
Disapproved	0.0	2.8
Disapproved very strongly	7.1	0.3
Not aware of my present plans	7.1	1.9
Total	100.0%	100.0%

Table 15. Responses To The Question, As You Plan For Your Occupational Future, Do You Have A Preference For:

Response	% Non-Respondents	% Respondents
	N=15	N=369
Working with ideas	6.7	10.3
Doing technical work	6.7	8.7
Some phase of business	13.3	14.4
Occupations related to agriculture	20.0	3.5
Professional occupations	6.7	18.4
Social service occupations	0.0	16.0
The Fine Arts	13.3	2.4
Occupation centered around home & family	0.0	10.3
Not given sufficient thought	13.3	9.8
Other	20.0	6.2
Total	100.0%	100.0%

Table 16. Responses To The Question, As You See Your Present Situation, How Much Higher Education Or Technical Training Would You Like To Have?

Response	% Non-Respondent	% Respondent
	N=15	N=355
Short vocational course	33.3	13.0
One year vocational school	6.7	6.5
Two year vocational school	0.0	6.8
Four years of college or to complete college	33.3	65.4
No additional schooling or training desired	26.7	8.5
Total	100.0%	100.0%

COMMENTS ON SECTION VII

Summary

When the selected items on the questionnaire were analyzed, there appeared to be some differences among the respondent and the non-respondent groups. The major differences in responses between the two groups include the following items:

(a) A large percentage of the non-respondents are concentrated in the Denver area, while the respondents, although more are living in the Denver area than any other section, are more widely dispersed throughout the state. This, combined with the number of schools attended and present employment status, seems to indicate the majority of the non-respondents went to work in the metropolitan area upon completion of high school rather entering some type of school as was the case with 77.5% of the respondent group.

(b) The average age of the non-respondent is slightly above that of the respondent.

(c) More females (62.5%) than males (37.5%) were non-respondents. Of the 398 subjects returning the original questionnaire, 51.0% were males and 49.0% were females.

(d) Items concerning high school curriculum indicate a majority of the non-respondents followed a general curriculum while in high school, and over 53% of this group indicated that the curriculum followed was helpful in obtaining a job. Less Than 19% of the group followed a pre-college curriculum. In contrast, 46.6% of the respondent group had followed a pre-college curriculum, and 60% of this group reported the high school program was not helpful in obtaining a job.

There appears to be, in general, a close relationship between the response patterns of each group. Such items as marital status, parents occupation, number of jobs held and questions pertaining to vocational training reveal similar patterns for both groups of subjects.

In considering both the differences and similarities of the respondent and non-respondent groups, it seems that any conclusions regarding the randomness of the sample must be cautioned by some of the differences noted in this analysis. The assumption that the original respondent group was comprised of a random sample appears justified considering the limitations previously mentioned.